

Application Number: 09/396,530

Group Art Unit: 3711

Filing Date: 9/15/99

Examiner Name: William Pierce

Inventors: Randall Addington et al.

Attorney Docket No.: 99-1002

Title: Method for Improving Bowler's Control

Assistant Commissioner of Patents

Washington, D.C. 20231

Amendment Under 37 CFR 1.116

In the Drawings, delete Figure 9 and add new Figure 9 therefore and add new Figures 10 and 11.

In the Specification, add new paragraphs as follows

On page <sup>12</sup>, after the paragraph starting with, "Figure 8 shows . . ." and ending with, "... bowler's finger in one direction.", delete the paragraph,

Figure 9, shows in a flow chart, a process of a preferred embodiment of the disclosed method

and add the following paragraphs.

Insert New Paragraphs

Figure 9 shows the inventive method described in a series of steps for using a finger pad shield placed in contact with the finger pad of a bowler's finger inserted into a finger hole of a bowling ball, to reduce the pressure on the finger pad when releasing the bowling ball from the bowler's finger and to improve a bowler's control over a direction or spin on a bowling ball, when lifting the bowling ball to impart spin and velocity, at release.

Figure 10 shows the bowler's aid used in applying lift to the ball at the ball's release, as known to those skilled in the art, with the bowler's thumb removed from the ball, the bowler's middle or index fingers applying force to the bowling ball finger holes through the finger pad shield and the counter force of the bowling ball against the finger pad shield and against the contact area formed by the finger pad shield and the finger pad.

Figure 11 shows in an exploded view, the index finger shown in Figure 10, with the force applied by the bowler by the bowler's index finger and finger pad in contact with the finger pad shield, through the finger pad shield and against the bowling ball finger hole, as shown in Figure 10.

SMC 7/11/02

End of New Paragraphs

On page 24, after the paragraph ending with, "... on the finger tip or within the contact area made by the finger pad shield 14 with the bowler's finger pad 16, and reducing wear on, and fatigue of, the finger pad," and before the paragraph starting with, "As bowling is an individual sport, with each bowler having his or her individual preferences, the shape of the bowler's aid, whether straight or curved, ..." Add the following paragraph.

Insert New Paragraph

The inventive method is shown in Figure 9 as a series of flow related steps that comprises applying lift to the ball at its release and the inventive application of the finger pad shield to spread the force on the finger pad over a contact area 17, as shown in Figure 10, formed by the finger pad shield 14 on the finger pad 16.

The inventive method, as shown and described herein, is shown in Figures 10 and 11, where the same numerals as used in Figures 1 to 8, signify the same or similar parts, and wherein the contact area 17, as shown by the dashed lines, as hidden by the respective finger pad shields 14 and the bowling ball hole 93, made between the finger pad 16 (not shown but located against and opposed to the finger pad shield 14, as would be understood by those skilled in the art), is formed between the opposed surface of the finger pad shield 14 and the finger pad and spreads the forces, shown by numeral 101 for the force applied against the by the finger pad 16 to the contact area 15 and to the finger pad shield 14 and to the bowling ball finger hole 92 and numeral 103 for the counter force applied to the finger pad shield 14 from the bowling ball hole 93, at release when lift is applied to the ball. As would be known to those skilled in the art and as shown and described in U.S. Patent 4,371,163, thumb 94 is shown removed from the ball 90 thumb hole 95, prior to the release of the ball 90 when lift is applied to the ball, according to the inventive method described herein.

As would be understood by one skilled in the art, and as shown in Figure 11, showing in an exploded view of Figure 10, with the placement of the bowler's finger 11 in the bowling ball hole 93 shown by arrow 105, the force 101, produced by the bowler's finger pad 16, against the finger pad shield 14, is applied through the contact area 15 and against the bowling ball 90 finger hole 93 when applying lift to the ball 90, at its release. The counter force from the bowling ball 90 is shown by arrow 103 from the bowling ball finger hole 93, against the finger pad shield 14 and through the finger pad shield, over the contact area 17, formed by the bowler's finger pad 16 and the finger pad shield.